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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/575,079

01/24/2007

Gerhard Schwenk

SCHW3006/JEK

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EXAMINER

LEWIS, JUSTIN V

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/575,079	Applicant(s) SCHWENK ET AL.	
	Examiner JUSTIN V. LEWIS	Art Unit 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>26 January 2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-8, 10-16, 18-20 and 29-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2003/0050891 to Cohen ("Cohen") in view of U.S. Patent No. 6,506,476 to Kaule, et. al. ("Kaule") and further in view of U.S. Patent No. 5,169,155 to Soules, et. al. ("Soules").

Cohen discloses a value document substrate and a method for producing same, in particular, the value document being a bank note (tracking check 136), having a feature substance (bar code pattern 136-7, which Examiner considers to be a "third feature substance", the bar code pattern representing an encoded version of a tracking number, per paragraph 36, lines 1-3) printed thereon with an ink mixture (see fig. 1), but

fails to disclose a first feature substance incorporated into the volume of the value document and a second feature substance formed by a luminescent substance applied to the value document in the form of a coding.

Kaule teaches a feature substance (luminescent substance 6, which may be incorporated into a value document) having material properties comprising emission and excitation spectra (note that the substance is “luminescent”): i) as particles uniformly dispersed throughout the volume of a substrate, as per col. 3, lines 18-19; ii) as part of a plastic material embedded within the substrate, as per col. 3, lines 19-22; or iii) as particles contained within an ink used to inscribe indicia upon a substrate, as per col. 6, lines 46-49), formed on the basis of a host lattice doped with rare earth elements (see col. 1, lines 5-8) creating a code for identifying authentic documents lying in its material properties (authentic documents will have these particles distributed throughout).

Soules teaches a feature substance (card code pattern 11, designed to blend into the background upon which it is located) applied to a substrate (see col. 9, lines 43-46, teaching the application of the card code pattern to the surface of a substrate) in the form of a coding extending over substantially the total surface of the value document (see col. 9, lines 43-46, teaching that the substance is applied in the form of a “card code pattern” comprising a series of “wide” and “narrow” bars extending from the top margin of the substrate to the bottom margin thereof).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the Kaule luminescent feature substance into the Cohen

tracking check in any or all of the aforementioned manners or use the Kaule luminescent particle ink to print the Cohen bar code, in order to provide a first feature substance, which affords security against counterfeiting, as explicitly taught by Kaule (see col. 1, lines 29-34).

It would have been obvious to print the Soules card code pattern on the surface of the Cohen tracking check, using the Kaule luminescent substance ink mixture, in particular, by applying the Kaule luminescent substance ink to the moist paper web in the form of the Soules coding during papermaking (see Kaule col. 3, lines 18-19, teaching that the luminescent materials can be added to paper pulp, which is inherently moist), in order to provide a second feature substance, hiding information, even from persons designated to handle the checks, as explicitly taught by Soules (see col. 1, lines 10-34).

4. Claims 9 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen in view of Kaule and further in view of Soules as applied to claims 1-8, 10-16, 18-20 and 29-34 above, and further in view of U.S. Patent Application Publication No. 2004/0084277 to Blair ("Blair").

Cohen, in view of Kaule and further in view of Soules, discloses the value document of claim 1, but fails to disclose the value document substrate being formed by a printed or unprinted cotton paper.

Blair teaches a value document comprising cotton paper (see paragraph 6, lines 6-7)

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the Blair cotton pulp in order to make the tracking check of Cohen in view of Kaule, and further in view of Soules, in order to give it better durability than commercial papers and a very distinctive feel, as explicitly taught by Blair (see paragraph 6, lines 7-9).

5. Claims 21-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen in view of Kaule and further in view of Soules.

Cohen, in view of Kaule and further in view of Soules, discloses a method of checking or processing the value document of claim 1, comprising the steps of: i) checking the authenticity of the value document (note that checking for and finding the Kaule luminescent particles confirms authenticity of the value document); and ii) carrying out a value recognition of the document by using at least one characteristic property of the first feature substance and/or luminescent substance for checking the authenticity of the value document, and at least one of the coding formed by the luminescent substance and the first feature substance for the value recognition of the value document (note that scanning the Soules card code pattern allows one to determine the face value of the value document, per Soules col. 9, lines 19-21), the first and second feature substances (Kaule luminescent particles disposed throughout the volume of the Cohen tracking check, and in the luminescent ink form having the shape of the Soules card code pattern) being irradiated with radiation from its excitation range (see Kaule col. 5, lines 35-39), the emission is determined (i.e. the Kaule luminescent particle ink in the shape of the Cohen bar code is read) at a distance of at least one

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wavelength from the emission range of the first feature substance (note that a conventional bar code scanner would be used to read the bar code; note also that in Kaule fig. 1, the wavelengths of a variety of luminescent materials are provided, each wavelength being far less than 10 micrometers; note further that in scanning each bar code, in order to allow the scanner to read the entire length of the bar code, it would be inherently necessary to hold the scanner's reading "eye" at a distance of greater than 10 micrometers away from the bar code), and the check of at least one of authenticity and the value recognition is carried out on the basis of the determined emission (with regard to the check of authenticity, note that scanning the Cohen bar code pattern and obtaining a tracking number matching that which is printed on the document confirms authenticity; further, with regard to the value recognition function of the bar code, note that per Cohen paragraph 14, the bar code pattern may be an encoded version of the tracking number; note also that per paragraph 15, the tracking number is associated with the face value of the document via a database), wherein the first and second feature substances are irradiated with at least one of visible and infrared radiation (see Kaule col. 5, lines 35-39) and the emission of the irradiated feature substance is determined in the infrared spectral range (see Kaule col. 1, lines 38-40), wherein the irradiation is performed with a light-emitting diode or laser diode (see Kaule, col. 5, lines 35-39, specifying that various light sources such as halogen lamps may be used; note that per the Merriam-Webster dictionary, a "diode" is "an electronic device that has two terminals"; note also that a halogen lamp is an electronic device that has two terminals; note further that halogen lamps emit light; accordingly, Examiner considers the halogen

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lamps taught by Kaule to be light-emitting diodes), and wherein the authenticity and value checks are executed by users of a first user group (Cohen payee, in accepting payment for goods and/or services rendered 502, as seen in fig. 11) and second user group (Cohen bank employee, in accepting the check from a payee 506, as seen in fig. 11).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUSTIN V. LEWIS whose telephone number is (571)270-5052. The examiner can normally be reached on M-F 7:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris H. Banks can be reached on (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JVL/

/Derris H Banks/
Supervisory Patent Examiner, Art

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